

IN THE CLAIMS:

Please amend the claims as follows.

Claim 1 (Currently Amended): A photomultiplier comprising:

an enclosure having an inside inner wall defining an internal space that is kept in a vacuum state, said enclosure whose at least part is constructed by a glass substrate having inner wall including a flat part;

a photocathode, accommodated in said enclosure, emitting a photoelectron photoelectrons to the inside inner space of said enclosure in response to light captured through said enclosure;

an electron multiplier section, arranged on a predetermined area of and in direct contact with the flat part of said glass substrate inner wall, for multiplying in a cascading manner the photoelectrons emitted from said photocathode, said electron multiplier having a structure making electrons multiplied in the cascade manner propagate along the flat part of said inner wall; and

an anode, arranged on an area excluding the area where said electron multiplier section is arranged on and in direct contact with the flat part of said glass substrate on which said electron multiplier section is arranged, for taking out electrons having arrived thereat among the electrons multiplied in a cascading manner in said electron multiplier section as a signal,

wherein said anode is comprised of a silicon material, and wherein, when viewing said electron multiplier section and said anode along an incidence direction of the light, said electron multiplier section and said anode are arranged along a direction orthogonal to the incidence direction of the light while being apart from each other.

Claim 2 (Currently Amended): A photomultiplier according to claim 1, wherein said enclosure comprises a lower frame comprised of said glass substrate glass material; an upper frame opposing said lower frame; and a side wall frame, provided between said upper frame and said lower frame, having a form surrounding said electron multiplier section and said anode.

Claim 3 (Currently Amended): A photomultiplier according to claim 2, wherein said electron multiplier section and said anode are arranged on the flat part of said glass substrate inner wall of said enclosure while in a state separated by a predetermined distance from said side wall frame constituting a part of said enclosure.

Claim 4 (Previously Presented): A photomultiplier according to claim 2, wherein said side wall frame is comprised of a silicon material.

Claim 5 (Previously Presented): A photomultiplier according to claim 2, wherein said upper frame is comprised of a glass material.

Claim 6 (Previously Presented): A photomultiplier according to claim 1, wherein said electron multiplier section is comprised of a silicon material.

Claims 7-8 (Canceled).

Claim 9 (Currently Amended): A photomultiplier according to claim 2, wherein each of said electron multiplier section, said anode, and said side wall frame is comprised of a silicon material[[,]] ~~said electron multiplier section, said anode, and said side wall frame being in direct contact with and fixed to the flat part of said glass substrate.~~

Claim 10 (Previously Presented): A photomultiplier according to claim 4, wherein said upper frame is comprised of a glass material; and

wherein said upper frame is in direct contact with and joined to said side wall frame such that said upper frame and said lower frame sandwich said side wall frame therebetween.

Claim 11 (Original): A photomultiplier according to claim 5, wherein said upper frame has a transmitting window for taking light into said enclosure.

Claim 12 (Canceled).

Claim 13 (Previously Presented): A method of manufacturing the photomultiplier according to claim 2, said method comprising the steps of:

preparing said lower frame, comprised of a glass material, constituting a part of said enclosure;

preparing said side wall frame constituting a part of said enclosure, said side wall frame being formed together with said electron multiplier section and said anode by etching a single silicon substrate;

preparing said upper frame constituting a part of said enclosure; and

fixing said side wall frame to said lower frame together with said electron multiplier section and said anode while making said side wall frame be in direct contact with said lower frame.

Claim 14 (Canceled).

Claim 15 (Previously Presented): A method according to claim 13, wherein said upper frame is comprised of a glass material; and

wherein said upper frame is in direct contact with and joined to said side wall frame such that said upper frame and said lower frame sandwich said side wall frame therebetween.

Claim 16 (Canceled).

Claim 17 (Previously Presented): A method according to claim 13, wherein said upper frame is formed with a transmitting window for taking light into said enclosure.

Claims 18-22 (Canceled).

Claim 23 (New): A photomultiplier according to claim 1, wherein said anode has an electron-incidence surface that part of the electrons multiplied in said electron multiplier section as a signal, the electron-incidence surface being substantially orthogonal to the flat part of said inner wall of the enclosure.